A QUARTERLY PUBLICATION OF HSEQ DEPARTMENT









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NEWSLETTER

OIL & GAS DEVELOPMENT COMPANY LIMITED

JULY-SEPTEMBER 2021

OGDCL Conferred 18th Annual Environment Excellence Award



The Annual Environment Excellence Awards are designed to recognize and promote the organizations which make an outstanding contribution to sustainable development. They aim to highlight policies, practices, processes and products from all sectors of business in the country, which help to achieve economic and social development without detriment to the environment and natural resources upon the quality of which continued human activity and further development depend.

OGDCL has been quite regularly participating in the Annual Environment Excellence Awards (AEEA) and has won successively this feat over the years.

Alhamdulillah, this year OGDCL has successfully followed the winning path as it has been declared Winner in the 18th Annual Environment Excellence Award (AEEA 2021). Mr. Touseef Hassan, InCharge HSE Sinjhoro, received the award on behalf of OGDCL.

The award ceremony took place on September 16, 2021 at Karachi. Government Minister, Syed Nasir Hussain Shah, who in the recent past also held the portfolio of the Sindh Forest Department was the Chief Guest at the 18th Annual Environment Conference and Excellence Awards-2021 organized by the National Forum for Environment and Health (NFEH).

In the ceremony it was shared that Forest Department's aggressive campaign to grow mangrove forests on the coastline was like a revolution as earlier it had even clinched the world record by planting most number of mangrove plants in a single day and Pakistan at present stands at the seventh position on the world ranking of mangrove forests as in the next two to three months our standing will further improve to the fourth or fifth position

NFEH President, Naeem Qureshi, Syed Nadeem Arif CEO EMC Pakistan, Secretary General NFEH Ruqiya Naeem, Vice President Engr. Nadeem Ashraf and Dr. Kaiser Waheed Former Chairman PPMA also spoke on the occasion.



Corporate Risk Management Team (C-RMT) First Meeting Convened



In the light of Enterprise Risk Management (ERM) Procedure, members of Corporate Risk Management Team (C-RMT) which constituted of EDs, GMs and HODs assembled to participate in the first meeting of C-RMT on September 06, 2021 at 1100 Hrs in Main Conference Room and discussed, reviewed and updated OGDCL's Risk Dashboard which included Corporate Risks, Controls, and Action Plans.

Being Chairman C-RMT, MD/ CEO Chaired the meeting and GM HSEQ, being Secretary C-RMT coordinated the session where significant Strategic, Operational and External Risks were discussed



CLEAN AND GREEN PAKISTAN



TREE PLANTATION

Dakhni Gas Processing Plant participates every season of the year in Prime Minister's initiative of "Clean and Green Pakistan" to address the challenge of climate change. This season, HSEQ Section Dakhni in collaboration with National Cleaner Production Centre, Rawalpindi and Danish School, Jand, Distt. Attock developed a vast horizon of ground with 320 Lemon, Kachnar and Peach saplings in the Monsoon Season-2021. NCPC provided these saplings to OGDCL whereas it was decided that the School's gardening staff would look after the plants as a matter of fundamental responsibility.

FIRST AID AND CPR TRAINING FOR OGDCL HOUSE FIRE WARDENS



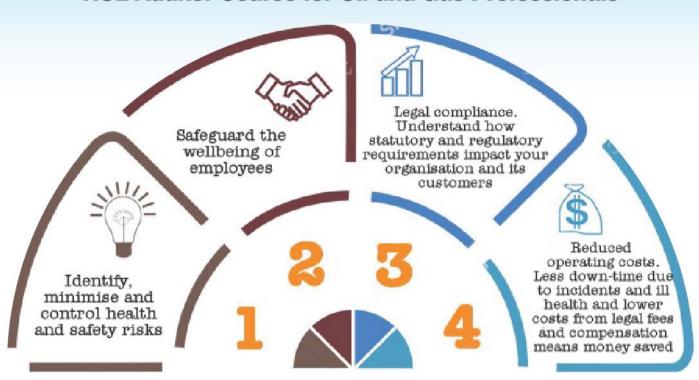
A comprehensive course offering First Aid and Cardiopulmonary Resuscitation (CPR) skills was conducted by Dr. Nadia Nisar on August 12, 2021 for the Fire Wardens of OGDCL House. The course met the legislation requirements for federal worker safety and included the latest first aid and CPR guidelines. Course Content included Preparing to respond; The EMS system; Check, Call, Care; Airway emergencies; Breathing and Circulation; emergencies; First aid for respiratory and cardiac arrest; Wound care; Head and spine injuries; Bone, muscle and joint injuries; Sudden Medical Emergencies; Environmental Emergencies; and Poisons (includes opioid poisoning). A Comprehensive Guide to First Aid & CPR was shared with the participants.





OIL & GAS TRAINING INSTIT

Advance (Certificate) Level ISO 14001 & ISO 45001-Compliant HSE Auditor Course for Oil and Gas Professionals



When the 5th Batch of "ISO 14001 & ISO 45001 Compliant HSE Auditor Course for Oil & Gas Professionals" was organized from August 02 – 06, 2021 at OGTI, it became first institute in Pakistan to take up the five training program in-series on the new & revised standards of ISO in a time span of just 36 months. This five-day intensive course enabled participants to develop the necessary expertise to audit an EHS Management System and to manage a team of auditors by applying widely recognized audit principles, procedures and techniques. During this training, the participant acquired the necessary knowledge and skills to proficiently plan and perform internal and external audits in compliance with ISO 19011:2018, the certification process according to ISO 17021. Based on practical exercises, the participant developed the skills and competencies to manage audit teams and audit programs, communicating with customers, conflict resolution, etc. necessary to efficiently conduct an audit. Three Modules were covered during the five days of the course namingly, Principles & Ethics of Auditing; Standards; and Exercises. The course was designed by Muhammad Mubashir Abbas, Lead HSEQ Auditor/ Instructor (A/Manager HSEQ) specifically based on Deming's PDCA Cycle to introduce new cross-functional HSE audit teams (having engineering/ technical backgrounds) to a dynamic risk-based approach for assessing the effectiveness of any HSE-MS, including those based upon ISO 14001 and ISO 45001 standards. The intensive 5-day course program consisted of a blend of tutorials, workshops and hands-on activities within the audit case study. The program encompassed the skills necessary to conduct an effective audit, including familiarizing with the auditee's operational environment and objectives; developing a risk-based work plan; effective interviewing, reviewing and testing techniques; recording, analyzing and assessing audit findings; and evaluating the auditee's HSE MS summarizing, presenting and reporting at high level the audit results to management. The participants worked in four small





ENTERPRISE RISK MANAGEMENTAWARENESS SESSIONS CONDUCTED AT MAJOR GAS PROCESSING PLANTS

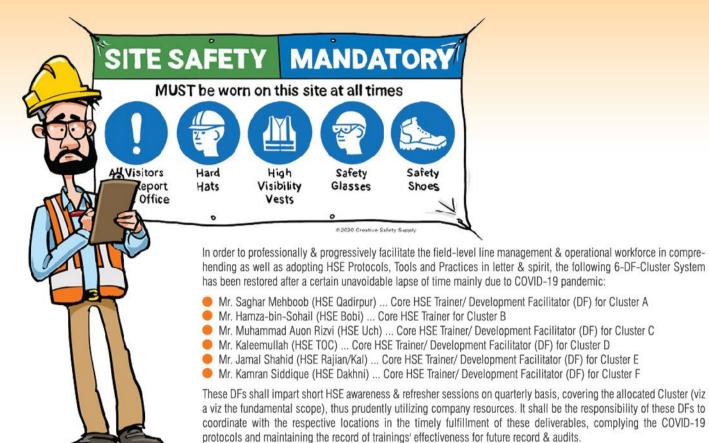


The purpose of Enterprise Risk Management (ERM) is to provide a system to manage risks to as low as reasonably practicable (ALARP) by identifying the risks (identification phase), analyzing the risks (analysis phase), evaluating the risks (evaluation phase), implementing the effective controls/barriers (treatment phase), communicating the risks (communication phase), and reviewing the risks (review phase). For an in-depth understanding, an awareness session on the same was arranged at all major gas processing plants. The aim & objective of the awareness sessions were to make workforce members aware of the revised ERM Policy Statement and Enterprise Risk Management protocols and enhance the skill-knowledge-attitude of employees towards risk management process. The presenters kicked off the sessions with brief introduction of OGDCL Integrated HSE System Manual and jumped to the main topics. In this connection, basic terminologies and definitions were also discussed namingly, Hazard Identification (HAZID) Hazard and Operability (HAZOP), HIRA Plan, HIRA Team, Individual Risk, Inherently Safer Design, Residual Risk, Risk (Rating), Risk Appetite, Risk Assessment etc. and topics discussed in detail were; Structure of OGDCL's Enterprise Risk Management (ERM); Risk Identification Phase; Risk Analysis Phase; Risk Evaluation Phase; Risk Treatment Phase; Risk Review Phase; Risk Communication; and Corporate Risk Management. Detailed deliberations were made on all important point of concerns. Participants showed keen interest through curious intermittent questions, which were entertained with proper logical justification.





HSE Development (6-DF-Cluster) System



Cluster A = Qadirpur, Maru-Reti, Khewari, adjoining drilling & seismic activities, EFP & base/ logistic store, medical facilities, and RC Office (as applicable) Venue = Qadirpur Cluster B = Bobi, Sinjhoro, adjoining drilling & seismic activities, medical facilities, EFP & base/ logistic store and RC Office (as applicable) Venue = Bobi

Cluster C= Uch, Loti, Pirkoh, Jhal Magsi, adjoining drilling & seismic activities, medical facilities, EFP & base/ logistic store and RC Office (as applicable) Venue = Uch Cluster D= TOC, Daru, KPD-TAY, Nur Bagla, Hundi Sari, adjoining drilling & seismic activities, medical facilities, EFP & base/ logistic store and RC Office (as applicable)

Cluster E= Rajian, Kal, Missakeswal, CNG, FMK, Toot, NP/PP, Dhodak, adjoining drilling & seismic activities, medical facilities, EFP & base/ logistic store and RC Office (as applicable) Venue = Rajian

Cluster F = Dakhni, Sadqal, Chanda, Mela, Nashpa, Doke Hussain, Togh, adjoining drilling & seismic activities, medical facilities, EFP & base/ logistic store and RC Office (as applicable) Venue = Dakhni

Following trainings shall be covered by the DF-Cluster System:

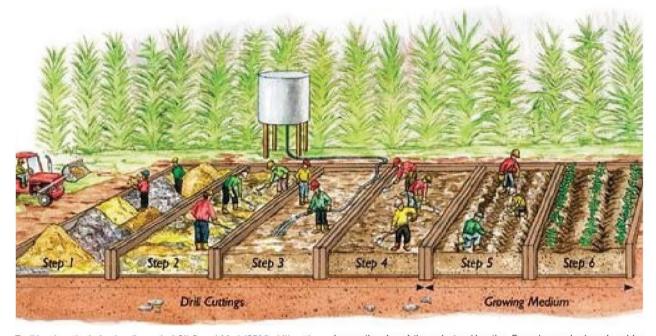
- 1. HSE Laws/ Regulations, Monitoring/ Measurement and Compliance Evaluation
- 2. Enterprise Risk Management, & ERP

Venue = TOC

- 3. Rules of Permit To Work (PTW) System, JHA, PPE
- 4. Journey Management & Defensive Driving
- Management of Change (MOC/ECR)
- Integrated Waste Management, MSDS
- 7. Control of Contractor/Service Companies
- 8. Incidents Investigation, PIR, STOP Cards Intervention



An Introduction to **Bioremediation Site**



have included pit burial or leaving the untreated cuttings scattered in-situ. Increasingly stringent regulations and increased environmental awareness have required new and improved disposal techniques. The process in practice is called Drill Cuttings Bioremediation. The concept is that some micro-organisms have the ability to digest organic compounds using specialist protein molecules, known as enzymes. Enzymes are what are referred to as biological catalysts. Some micro-organisms produce enzymes capable of accelerating the biodegradation process of organic pollutants into harmless carbon dioxide, water and clean solids. This natural process is exploited and used in the oil industry to treat drill cuttings waste. Drill cuttings are placed into the cells of the bunded areas, along with microbes. The mixture can be tilled by either manpower or machine depend involving following methodology:

Traditional methods for the disposal of Oil-Based Mud (OBM) drill cuttings ing on the size of the project and location. Properly organized regular mixing and passage of time allows the pollutants in the drill cuttings to be digested and consumed by the microbes. This process causes the percentage of oil in the drill cuttings to drop to a level which is environmentally acceptable. In many cases the end product, containing harmless nutrients, can be used as a growing medium. The balance of micro-organisms and chemicals required is very much dependent on the composition of the drill cuttings or other waste material. In this perspective, OGDCL configured its First Biosite at Nashpa Well #04 for the purpose of safe disposal/ treatment of Oil Based Mud (OBM) cuttings through bioremediation. The site comprised of one storage and three reinforced cement concrete (RCC) pits to capacitate the load of 5,000 cubic-meter of OBM cuttings to be treated through bioremediation. It is noteworthy to mention measured quantities of sawdust, sand, nutrients and naturally occurring that Dr. Bashir, former DG EPA KPK approved the Biosite at Nashpa Well-04

Step 1 The drill cuttings is fed into the process cells along with sand and sawdust.

Step 2 The drill cuttings, sand and sawdust are tilled until thoroughly mixed

Step 3 A microbe and nutrient solution is sprayed over the cuttings.

Step 4 The mixture is sprayed and tilled regularly, until measured oil-on-cuttings 00C becomes less than 1%.

Step 5 The oil content of the mixture is fallen to acceptable levels as the vegetation is tested through seeds.

Step 6 Once the seeds shoots up, toxicity levels are tested to see whether the bioremediated drill cuttings are fit for disposal.

14 Objectives, Targets and Management Programs

Formulated for the Implementation of HSE System at OGDCL House

After the successful certifications of our major operating fields Dakhni, Nashpa, Qadirpur, KPD-TAY, Uch, Sinjhoro, Chanda and Mela against the ISO 14001 and ISO 45001 standards, MD/ CEO has picked OGDCL House as the next corporate target. The cross-functional team constituted for the assignment formulated 14 Objectives, Targets and Management Programs for the implementation of HSE System at OGDCL House as scribed below:



- Emergency External Staircase design/ erection/ modification in order to provide safe and effective evacuation of building occupants in emergent scenarios in compliance to the Regulatory Requirement i.e. Building Codes of Pakistan Fire Safety Provisions 2016.
- The water drained after ablution (wazu) from each floor will be stored separately and utilized for horticulture as water conservation strategy.
- The energy load of electrical appliances at Lifts Control Room of OGDCL House will be estimated; and the same be switched over to renewable energy sources i.e. Solar Power as an energy conservation strategy.
- The mechanism for tracking and disposal of condemned electronic items (e-waste) will be developed and in case of auction the successful bidder be bound through undertaking for the safe disposal of e-waste.
- Based on Indoor Quality Air Monitoring, Occupancy Load of Lower Ground (LG) floor will be managed through replacement with the construction of Data Control Center.
- In order to provide safe and effective evacuation of building occupants in emergent scenarios, the communication system for Lifts will be connected to Fire Control Room.
- 7 Utility water conservation in the building will be initiated through installation of Sensor Taps as water conservation strategy.
- Fire resistance paint/ coatings will be applied at high risk sensitive installations with significant fire load i.e. SDP, RMD Data Center, Server Rooms, Data Control Center, Fire Control Room and CCTV Control Room.
- 9 Smoke Extractor/ Exhaust will be installed at B-2 to reduce human exposure to toxicants generated through vehicular exhaust and other activities.
- 10 UV lights will be installed in AHUs of HVAC System to control microbiological contamination that would not only reduce human exposure to microbiological agents but also improve indoor air quality.
- In order to improve employees' health and fitness by curtailing medical bills; awareness sessions will be imparted on quarterly basis on Lifestyle & Heart related ailments, Office Safety / Ergonomics, CPR and First-Aid.
- FM200 Fire Suppression System will be installed in the Seismic Data Processing Centre, Floor-12, Tower C.
- Allocation of Disaster Recovery (DR) Site at NTC, Islamabad for the data of Seismic Data Processing Centre (Floor–12, Tower C).
- A CO2 Suppression System will be installed in the Transformer [03 x 1000 KVA, 01 x 1250 KVA] Room in Basement-I.

To smoothly achieve this corporate milestone, HSEQ Department devised a pragmatic roadmap/ program. The cross-functional team has been assisting all concerned HODs and team members by arranging and coordinating specified training, awareness & consulting sessions and developing requisite work-products pertaining to OGDCL's Integrated HSE System Manual utilizing company's own internal resources to make this project a success in the shortest possible time. Certification Body would conduct Stage-I/ Gap Analysis and Stage-II Audits, later on in January 2022.



NEWSLETTER

Sinjhoro, Chanda and Mela Fields accomplished

ISO 45001 and ISO 14001 Certifications

ADVANTAGES OF ISO 45001 CERTIFICATION











In continuation of the successful achievement of ISO-14001 and ISO-45001 certification for major fields, OGDCL accomplished another milestone by attaining ISO-14001 and ISO-45001 certifications for its Sinjhoro, Chanda and Mela fields. Now these fields are ISO-14001 and ISO-45001 compliant and are on the track for pursuing the goal of continual improvement with great zeal and zest. Collective efforts made in attaining these certifications will be carried forward for improving the overall safety culture of these fields.













Safety Alert

Fall Incident From Man Riding Basket Missakeswal Field, District Rawalpindi

Fall incident occurred on March 15, 2021 in Missakeswal Field where a rectification job of overhead electric cable (installed for Well-2's power supply) was being carried out, a team along with crane-mounted truck was deputed, unfortunately the wire rope of the crane-mounted truck broke during the hoisting job resultantly two persons fell down from the man riding basket from about 15 feet height and inflicted severe injuries.

Causes

- Although risk assessment of the crane-mounted truck, lifting & hoisting operations was recorded in the Risk Register, however
 the hazards, associated risks and controls for using man riding baskets for the work-at-height requirement missed out;
 therefore never the specific dangers communicated to the concerned stakeholders.
- Third party inspection of crane-mounted truck carried out but the deficiencies enlisted in the inspection report never considered by the concerned maintenance teams for rectification purposes.
- Wire rope found unfit for use and the crane hook's was not fitted with a safety catch or equivalent.
- · Electrical Work Permit was issued but Work-At-Height Permit not considered to safely execute the hoisting job in specificity.
- . Job Performers were not wearing safety harnesses the work-at-height's foremost requirement.
- Electrical Work Permit Issuing Authority, Safety Coordinator, Receiving Authority and Job Performer never met formally to discuss the job especially for Job Hazard Analysis to assess and communicate site's as well as job's hazards.
- No formal toolbox talk conducted to crosscheck the details of the work-at-height in perspective of hazards, associated risks and enforcing control like safety harness.

Recommendations

- Area and field management to strictly ensure that no maintenance, repairs and modifications be carried out without a prior risk assessment, valid work permit and availability of competent team.
- Compliance of Safety Monitoring Plans be ensured and the deficiencies enlisted in the inspection reports be rectified on most urgent basis by the concerned maintenance teams. Unfit equipment should not be used until their fitness is reassessed and assured.
- Maintenance jobs using man riding basket always be planned with the permission of field management on the basis of risk assessment of each basket's load-bearing capacity.
- When the carriage of personnel by crane is required, the man riding basket be suitably tested, have a current test certificate, and clearly marked "Man Riding Only" & "Load-bearing Capacity" on it.
- All wire ropes and other attached lifting equipment/ accessories must have a valid fit-for-use certificate.
- · Crane hooks must be fitted with safety catches or equivalent.
- All personnel using man riding basket be secured to the crane hook by a safety harness and the safety harness be secured to the master link of the supporting sling of crane.
- Inventory of all requisite personal protective equipment (PPE) be sufficiently maintained as per each location's PPE Need Assessment Matrix.
- Field HSE Section to arrange essential HSE trainings for the operation & maintenance teams and field management to ensure maximum participation as well as to gauge the effectiveness of such sessions for achieving the intended purpose.



Responsibility

It is the prime responsibility of concerned maintenance teams to ensure predictive as well as condition based monitoring of all
hoisting & lifting equipment and accessories in true letter & spirit and rectify the deficiencies enlisted in the inspection reports
on most immediate basis. They are also responsible to ensure that any unfit equipment not taken into service until fitness is
fully guaranteed.

OFFICE SAFETY



Workstations

A workstation consists of the equipment and furniture associated with a typical office area/control room (i.e., desk, chair, and computer components).

- Maintain a neutral posture and sit upright when at your workstation. Sit as far back in your chair as possible and make sure the chair is adjusted to provide adequate support to your back.
- Keep elbows in and vertically under your shoulders at a 90 degree angle. Ensure your forearms are level (horizontal) when using the keyboard.
- Keep your wrists in a straight neutral position. Use wrist supports made of a padded material.
- Avoid extended reaches and ensure the chair height allows your feet to rest flat on the floor or on a footrest.
- Place the computer's monitor 50-70 cm (20-28 inches, about one arm distance) away from your face.
- Position the monitor at eye level or slightly lower, so the center of the screen is approximately 15-25 degrees below your line of vision.
- Use a headset or speakerphone if you use the telephone for extended periods of time.
- Take regular breaks when working at a computer for long periods of time.

Office Areas

- Arrange office furnishings in a manner that provides unobstructed areas for movement.
- Prevent slips, trips, and falls in the office area by clearly marking any difference in floor level, securing throw-rugs and mats to prevent slipping hazards, and cleaning up fluid spills.
- Never climb on desks, chairs, cabinets, shelves, or boxes. Use an approved ladder.
- Do not use a ladder in front of a door unless the door is locked and barricaded, or a standby man is positioned on the other side of the door.
- Take care when sitting in a chair with rollers. Make sure it does not roll out from under you when you sit down.

- Ensure that all chair feet/castors remain firmly on the ground when seated. Repair or report any chair damage that could be hazardous.
- Ensure that electrical cords and phone cords do not cross walkways or otherwise pose a tripping hazard. If you cannot move a cord, have a new outlet installed or secure the cord to the floor with cord covering strips. Do not tape cords down or run them underneath carpet.
- Do not roll chairs over electrical cords.
- When using file cabinets, open only one drawer at a time to keep the cabinet from toppling. Close drawers when they are not in use.
- Do not place heavy objects on top of cabinets. Be aware that anything on top of a cabinet may fall off if a drawer is suddenly opened.
- Do not store hazardous materials or chemicals in the office area.
- Do not place items on shelves within 45 cm (18 inches) of the ceiling. This space will allow ceiling sprinklers (if present) to function properly in a fire.
- Close hand-operated paper cutters after each use and activate the quard
- Take care when working with copy machines. If you have to open the machine for maintenance, repair, or troubleshooting, remember that some parts may be hot.
- Unplug paper shredders before conducting maintenance, repair, or troubleshooting.
- Unplug defective machines and have them repaired immediately. Do not use any machine that smokes, sparks, or appears defective in any way.
- Ensure that glass doors have some type of marking to keep people from walking through them.

Energy Savings in Office Areas

- Turn off computers, monitors, printers and copiers when not in use.
- Ensure built-in power management system for office equipment is active to save energy during periods of inactivity.
- Ensure screensaver is compatible with the computer's power management features and allows system to enter power saver mode.
- Using a laptop computer instead of a desktop system can save 80-90% in electrical cost.
- Replace lights with compact LED lights
- Install occupancy sensors to automatically turn off lights.
- Regularly change HVAC filters, tune-up HVAC units and install programmable thermostats. Use outside air and water side-economizers for free cooling when outside air temperatures and conditions permit (during spring and fall).

